DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
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MARINE CORPS ORDER 2400.2

From: Commandant of the Marine Corps
To: Distribution List

Subj: MARINE CORPS MANAGEMENT OF THE RADIO FREQUENCY SPECTRUM

Ref: (a) OPNAVINST 2400.20E (NOTAL)
(b) ACP 190 U.S. Supp-1(B)
(c) NTIA Manual of Regulations and Procedures for Federal Radio Frequency Management
(d) NTP-6(C)
(e) OPNAVINST 2410.31D (NOTAL)
(f) MCO 2410.2
(g) OPNAVINST 2400.7F (NOTAL)
(h) MCO 3430.1A
(i) MCO 3430.3C

Encl: (1) List of Abbreviations and Acronyms
(2) Procedures For Obtaining Frequency Allocations Within the United States Marine Corps
(3) USMC Assigned Frequency Managers

1. Purpose. To establish policy as directed by the Secretary of Defense, and apply the instruction in reference (a) concerning use of the radio frequency electromagnetic spectrum within the United States Marine Corps (USMC), to establish and assign responsibility for radio frequency electromagnetic spectrum management within the USMC, and to provide guidance and task assignments.

2. Scope. This Order applies to all USMC commands and activities, both active and Reserve, involved in the research, development, procurement or operation of communications-electronics (C-E) equipment which transmit or receive electromagnetic radiation. This Order does not change or nullify any national, DoD, or naval policy contained in the references, but serves to define a USMC radio frequency electromagnetic spectrum management program and amplify existing policy and guidance as they pertain to Marine Corps commands and activities.

3. Definitions. Abbreviations and acronyms used in this Order are explained in enclosure (1). Terms used in this instruction are defined as follows:

a. Electromagnetic Spectrum. The range of frequencies of electromagnetic radiation from zero to infinity.

b. Radio Frequency (RF). A general term applied to electromagnetic frequencies below 3000 GHZ.

c. Communications-Electronics (C-E). The specialized field concerned with the use of electronic devices and systems for the acquisition or acceptance, processing, storage, display, analysis, protection, disposition, and transfer of information. In this Order, C-E systems include communications, radar, navigation, scanners, and all other systems which use the radio frequency electromagnetic spectrum.

d. Frequency Allocation

(1) A frequency band established by national or international rules and regulations for specific categories of radio services, such as radio location, radio navigation, mobile or fixed communications, space telemetry, etc.

(2) As used in this Order, an approved frequency allocation is provided by the Chief of Naval Operations (CNO) and acknowledges that development and/or procurement of C-E equipment can be supported for operation on a specific frequency or band of frequencies within the radio frequency spectrum. CNO approval for frequency allocation is normally not provided until CNO acquires both national (NTIA) and DoD (JFP, USMCEB) approval for same frequency allocation.

e. Frequency Assignment. The discrete frequency or frequencies on which C-E equipment or a system is authorized to operate within its allocated frequency band at the location(s) designated and within the constraints of the authorized assignment.

f. Electromagnetic Compatibility (EMC). The ability of telecommunications equipment, subsystems, and systems to operate in their intended operational environments without suffering or causing unacceptable degradation because of electromagnetic radiation or response.

g. Electromagnetic Environmental Effects (E(3)). The impact of the electromagnetic environment upon the operational capability of equipment, systems, and platforms. It encompasses all electromagnetic environment disciplines, including EMC/EMI, EMV, EMP, ECCM, EMCON, HERO, P-STATIC, and RADHAZ.

4. Policy

a. Frequency Allocations

(1) Applications for frequency allocations for C-E equipment shall be initiated by the organization, activity, or command developing and/or procuring the C-E equipment during the conceptual stage (stage 1) or as soon as an RF band(s) of operation is identified. Applications for frequency allocation will be updated during each phase

of allocation (defined by DD Form 1494, Feb 87) and whenever significant changes are planned in system electromagnetic characteristics or operational use.

(2) Marine Corps organizations, activities, or commands developing and/or procuring C-E equipment, for which the USMC is not the lead service for procurement or is not the lead procurement organization, shall ensure that the application for frequency allocation submitted by the lead service or procurement organization contains any appropriate USMC peculiar information required to permit proper frequency assignment to Marine Corps commands and activities.

(3) Funds shall not be obligated for the development, production, or procurement of C-E equipment beyond the conceptual stage until a frequency allocation for the equipment has been approved by the CNO.

(4) Applications for frequency allocations are not required for electro-optics (3000 GHZ - 3000 THZ), for fuze development per reference (c), or for low power equipment as defined in reference (d). Use of low power devices without restriction is limited to narrow bandwidths and extremely low radiated power. Tactical equipment normally does not qualify for use as lower power devices. Applications for frequency allocations for nontactical, commercial or intrabase radios, used either for nontactical support on USMC installations or for communications support in tactical operations, are required.

(5) Electromagnetic compatibility (EMC) considerations for the development and operation of C-E systems are mandatory. Policy and requirements are governed by references (e) and (f). Waiver authority for EMC requirements resides with the CNO.

(6) The degrading effect of E(3) on C-3 systems, in use or intended for future use, will be minimized to the maximum extent possible. The duties and responsibilities for E(3) are governed by the Marine Corps E3 Control Program, per reference (g).

b. Frequency Assignments

(1) Radio frequency assignment requests shall be initiated by Marine Corps organizations, activities, or commands only after frequency allocation has been approved for the specific geographic area(s) within the US&P.

(2) Radio frequency assignment requests for foreign countries shall be initiated by Marine Corps organizations, activities, or commands only after the responsible CINC has released the approved frequency allocation information on the specific C-E equipment(s) to the country(s) in which frequency assignment(s) is required.

(3) C-E transmitting equipment shall not be activated without both a frequency allocation and a frequency assignment. The Joint Frequency Panel (JFP), USMCEB retains assignment authority for commonality of netting frequencies, for control of international actions and for control of satellite communications.

5. Procedures

a. Frequency Allocations. Marine Corps organizations, activities, or commands will utilize the procedures listed in enclosure (2) to obtain new or updated frequency allocations. Criteria listed in paragraph 6a of reference (a) apply to all USMC organizations, activities, and commands.

b. Frequency Assignments

(1) Frequency assignments can be requested by any command or activity with a requirement to operate C-E equipment which has an approved frequency allocation (J/F 12 Paper). Requirements for frequency assignment will be submitted in Standard Frequency Action Format (SFAF), as set forth by references (b) and (d), or as promulgated by the CMC (CCT) when new Standard Frequency Action Formats are approved, but have not been published or reference publications have not been updated. Requirements for frequency assignment for NATO countries will be submitted in NATO 14 Point Format, as set forth by the HQ USECOM Spectrum Management Manual. The preferred method of submitting requirements for frequency assignment is Naval message. Requirements for frequency assignment should be classified when associated with operations/exercises that are classified. Lead times for submitting frequency assignment requests vary according to activity/command making the assignment, normally 60-120 days in advance of exercises/operations. Frequency requests should be submitted as soon as requirements are known.

(2) Marine Corps FMF commands requiring training frequencies on Marine Corps installations will submit requirements to the base, post, or station CEO. FMF commands in CONUS requiring training frequencies for areas outside of Marine Corps installations will submit requirements to the appropriate Naval Area Frequency Coordinator, as identified in reference (a). FMF commands requiring training frequencies outside of Marine Corps installations in Hawaii will submit requirements to the Naval Communications Area Master Station, Eastern Pacific (NAVCAMS, EASTPAC). FMF commands under the operational control of CG, 1st MEB will submit frequency requirements to the G-6, 1st MEB. Copies of all FMF frequency assignment requests in US&P will be forwarded to the Naval Electromagnetic Spectrum Center, Washington, DC (NAVEMSCEN). FMF commands requiring training frequencies on mainland Japan or on Okinawa will submit requirements to the Assistant Chief of Staff, Communications-Electronics, Marine Corps Bases, Japan, Camp Butler, Japan (COMMARCORBASESJAPAN CAMP BUTLER JA//ACSCE//). FMF commands requiring training frequencies in other countries in the western Pacific will submit requirements to the G-6, III MEF, with the exception of

commands afloat or commands directed to submit requirements to an exercise director or JTF headquarters. Copies of all FMF frequency assignment requests in the Western Pacific will be forwarded to the G-6, III MEF.

(3) Marine Corps bases, posts, and stations in CONUS will submit frequency requirements to the appropriate Naval Area Frequency Coordinator, as identified in reference (a). Marine Corps base, posts, and stations in Hawaii will submit frequency requirements to NAVCAMS, EASTPAC. Marine Corps Base, Camp Butler will submit all base, post and station requirements for Japan to the Commander, U.S. Forces Japan (COMUSFORJ) (ATTN: Navy Frequency Coordinator).

(4) For Marine forces afloat, the CLF will submit frequency requirements to the CATF for consolidation and approval, as required by reference (d). The CATF will submit a consolidated frequency requirement to the appropriate frequency coordinating agency or CINC via the numbered fleet commander.

(5) Frequency assignment requests for the NAVEUR AOR are submitted according to what category of deployment Marine forces are involved in, a reinforcement role or an amphibious role.

(a) Reinforcement Role. FMF commands deploying to the NAVEUR AOR will submit frequency assignment requests (in NATO 14 Point format) to HQ FMFEUR DESIGNATE, INFO CINCUSNAVEUR, NAVEMSCEN, JFMO LANT and addressees deemed appropriate (National or NATO requirements). HQ FMFEUR DESIGNATE will forward requests to CINCUSNAVEUR or the appropriate NATO command.

(b) Amphibious Role. All FMF frequency requirements for Marine forces operating in the NAVEUR AOR in an amphibious deployment role will be submitted to the CATF in accordance with reference (d). The CATF will submit a consolidated landing force/afloat support frequency requirement to the numbered fleet commander INFO HQ FMFEUR DESIGNATE and addressees deemed appropriate. The fleet commander will forward frequency assignment requests to CINCUSNAVEUR, INFO those addressees deemed appropriate.

c. Frequency Record Management

(1) The DoD Frequency Resource Record System (FRRS) is the single worldwide record of DoD frequency assignments. The majority of Navy and Marine Corps commands and activities do not have the large number of frequencies assigned (either permanent or temporary) that require access to the FRRS data base. To assist Navy/Marine Corps ashore commands in maintaining and managing their relatively small number of frequency assignments, CNO initiated the Frequency Assignment Computer Terminal System (FACTS). FACTS is a MS DOS compatible, microcomputer based program managed by the

Commander, Space and Naval Warfare Systems Command. FACTS helps the local frequency manager control the use of frequencies assigned to the local area, calculate potential interface for proposed frequency usage, and prepare requests for frequency assignment as SFAF messages. The FACTS Configuration Control Board (CCB), which includes a Marine Corps member, provides oversight to the program and approves software changes, establishes priorities for maximizing FACTS capabilities, and recommends program funding to the Program Manager. The Middle Atlantic Area Frequency Coordinator (MID-LANT AFC), Patuxent River, Maryland acts as the FACTS Executive Manager and provides day-to-day management of the program.

(2) Marine Corps bases, posts, stations and FMF commands may participate in the FACTS Program on a voluntary basis. Marine Corps commands and activities may apply directly to the Executive Manager to participate in the FACTS Program. Two regional managers assist the Executive Manager with overseeing FACTS management and operations in their respective regions, as follows:

(a) Joint Frequency Management Office Atlantic (JFMOLANT) Norfolk, Va. All FACTS participants within Europe and the Eastern U.S., to include Caribbean, Azores, and Iceland.

(b) Navy Frequency Coordinator, Western U.S. (NFCWUS), Point Mugu, CA. All FACTS participants within the Pacific, to include the Western Pacific, the Western U.S., and Alaska.

(3) The following Marine Corps commands will act as Marine Corps FACTS regional representatives. These regional representatives will compile information or respond to inquiries relating to Marine Corps specific information for commands and activities (Regular and Reserve) within their assigned region. The regional assignments are:

(a) Communications-Electronics Officer, Marine Corps Base, Camp Lejeune, NC. All USMC FACTS participants within Europe and the Eastern U.S. (east of the Mississippi River).

(b) Communications-Electronics Officer, Marine Corps Base, Camp Pendleton, CA. All USMC FACTS participants within the Western U.S. (west of the Mississippi River).

(c) Assistant Chief of Staff, G-6, Marine Corps Bases Pacific, Camp H.M. Smith, Hi. All USMC FACTS participants in Hawaii and the Western Pacific area.

d. Frequency Usage Reporting. All Marine Corps commands and activities will report usage of the radio frequency spectrum in accordance with references (d) and (g).

e. Frequency Authorization For Electronic Countermeasures (ECM). EW training requirements include the use of ECM on radio

frequencies. EW officers are required to coordinate frequency usage and receive the appropriate approval to conduct ECM over the radio frequency spectrum. Coordination is required between the EW officer, the CEO/G-6, and the facility frequency manager to ensure TABOO and restricted frequencies are not interfered with. Reference (h) provides regulations and guidance for ECM operations in the United States and Canada. For foreign countries, ECM frequency assignment should be coordinated and approved using the same procedures established for frequency assignment requests, unless otherwise directed by an applicable CINC, sub-unified command, or JTF order or operations plan.

f. Meaconing, Intrusion, Jamming and Interference (MIJI) Reporting. MIJI reporting requirements and procedures are established by reference (i).

6. Responsibilities

a. Director, C4 Division, C4I2 Department, Headquarters, U.S. Marine Corps. Under the Director, C4 Division, the Head, Telecommunications Branch (CCT) provides overall policy guidance and direction to Marine Corps radio frequency spectrum management, and shall be responsible for:

(1) Representing the Marine Corps in joint, national, and international spectrum management policy.

(2) Ensuring Marine Corps compliance with naval regulations regarding radio frequency spectrum management.

(3) Reviewing and coordinating all Applications for Frequency Allocation (DD Form 1494) submitted by Marine Corps activities and commands. This includes the proper endorsement and submission of applications to CNO (OP-941) for review and approval through the JFP, USMCEB.

(4) Coordinating Marine Corps frequency allocation and frequency assignment matters with the Director, NAVEMSCEN.

(5) Providing a Marine Corps representative to the FACTS Configuration Control Board.

(6) Coordinating Marine Corps spectrum management analysis requirements with the Marine Corps Deputy Director, ECAC.

(7) Designating the Marine Corps primary and alternate members to the JFP, USMCEB.

b. Commanding General, Marine Corps Combat Development Command (MCCDC) and Commanding General, Marine Corps Research Development and Acquisition Command (MCRDAC). Ensure an approved frequency allocation is obtained prior to the development of C-E equipment and establish safeguards to

ensure that an approved frequency allocation is obtained before assuming contractual obligations for full-scale development, production, or procurement of any C-E equipment.

c. Commanding General, Fleet Marine Force, Pacific (FMFPAC) and Commanding General, Fleet Marine Force, Atlantic (FMFLANT). Assume responsibility for radio frequency spectrum matters for commands under your authority on behalf of the CMC and coordinate Marine Corps frequency allocation and frequency assignment requirements with unified commands and FLTCINC's.

d. Commanding General, Fleet Marine Force, Europe Designate. Act as the Marine Corps radio frequency spectrum representative to USCINCEUR and CINCUSNAVEUR, and be responsible for:

(1) Coordinating Marine Corps frequency allocations and frequency assignments in Europe and for NATO.

(2) Providing a Marine Corps representative to the Allied Radio Frequency Agency (ARFA), when required.

e. Commander, Marine Corps Bases, Japan. Act as the Marine Corps radio frequency spectrum representative to the Government of Japan and to the Commander, U.S. Forces Japan, and be responsible for coordinating Marine Corps frequency allocations and frequency assignments in Japan.

7. Action

a. Commands and activities shall exercise responsibilities set forth in paragraph 6.

b. Fleet Marine Force commanders shall comply with the content of this Order and shall ensure that radio frequencies used in their commands are coordinated and authorized.

c. Commanders of Marine Corps installations and activities shall comply with the content of this Order and shall:

(1) Ensure that all C-E equipment considered for local procurement have an approved frequency allocation.

(2) Ensure that only assigned radio frequencies are used by installation and tenant activities, and that frequency assignments and records are kept current.

(3) Report radio frequency use below 30 MHZ, in accordance with references (d) and (g).

8. Reserve Applicability. This Order is applicable to the Marine Corps Reserve.

R. L. PHILLIPS
Director, Command, Control,
Communications and Computer
(C4) Division

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ABBREVIATIONS AND ACRONYMS

ACP	Allied Communications Publications
C-E	Communications-Electronics
C4	Command, Control, Communications and Computer
C4I2	Command, Control, Communications and Computer, Intelligence and Interoperability
CATF	Commander, Amphibious Task Force
CCB	Configuration Control Board
CINC	Commander in Chief
CINCUSNAVEUR	Commander in Chief, United States Navy, Europe
CLF	Commander, Landing Force
CNO	Chief of Naval Operations
CONUS	Continental United States
DOD	Department of Defense
E(3)	Electromagnetic Environmental Effects
ECAC	Electromagnetic Compatibility Analysis Center
ECM	Electronic Countermeasures
ECCM	Electronic Counter-Countermeasures
EMC	Electromagnetic Compatibility
EMCON	Emission Control
EMP	Electromagnetic Pulse
EMV	Electromagnetic Vulnerability
EW	Electronic Warfare
FACTS	Frequency Assignment Computer Terminal System
FMF	Fleet Marine Force
FMFEUR	Fleet Marine Force, Europe
FRRS	Frequency Resource Record System
JFMO	Joint Frequency Management Office
JFP	Joint Frequency Panel
GHZ	Gigahertz
HERO	Hazards of Electronic Radiation
MEB	Marine Expeditionary Brigade
MEF	Marine Expeditionary Force
MHZ	Megahertz
MOS	Military Occupational Specialty
NATO	North Atlantic Treaty Organization
NAVEMSCEN	Naval Electromagnetic Spectrum Center
NAVEUR	Navy, Europe
NTIA	National Telecommunications and Information Administration
NTP	Naval Telecommunications Procedures
P-STATIC	Precipitation Static
RADHAZ	Radiation Hazard
RF	Radio Frequency
SFAF	Standard Frequency Action Format
SPAWARSYSCOM	Space and Naval Warfare Systems Command
THZ	Terahertz
USMC	United States Marine Corps
USMCEB	United States Military Communications-Electronics Board
US&P	United States and Possessions

PROCEDURES FOR OBTAINING FREQUENCY ALLOCATIONS WITHIN THE UNITED STATES MARINE CORPS

1. DD Form 1494, Feb 87 (Application for Equipment Frequency Allocation) will be completed by the organization, activity, or command with lead development and/or procurement authority and forwarded to the CMC (CCT), via the appropriate chain of command. Instructions for completing DD Form 1494 are contained on the reverse sides of the form.

2. After review and approval, the CMC will forward the DD Form 1494 to CNO (OP-941F). Submitting organizations, activities, or commands requiring a technical review of the application will have the technical review completed prior to submission to the CMC. The CMC may request a technical review of the application prior to submission to CNO. Technical reviews may be available from such organizations as SPAWARSYSCOM, ECAC, NAVEMSCEN, and the equipment manufacturer.

3. Specific geographical areas must be identified for US&P during Stages 1, 2 and 3 of Allocation. For locations outside of US&P, specific locations and/or countries must be identified in the Foreign Coordination General Information section of DD Form 1494. These listings identify coordinating requirements to the responsible CINC(s) for the countries identified in the DD 1494. The originator of an application for equipment frequency allocation which contains sensitive or classified information will attach a statement of authorized disclosure to the DD Form 1494. This statement will identify what sensitive or classified information, if any, is releasable to which country(s).

4. A determination of the EMC of the proposed equipment/system in its intended electromagnetic environment shall be conducted by the originator of the DD 1494. A copy of the EMC evaluation will accompany the Stage 3 Application For Equipment Frequency Allocation. A waiver of EMC standard parameters can only be approved by CNO. Waiver requests will be included with DD 1494 submissions and will include proper justification for the waiver (i.e., economic, technical, schedule, etc.).

5. The CNO (OP-941F) will forward USMC Applications For Equipment Frequency Allocation to the JFP, USMCEB, and to NTIA when appropriate, for review and approval. The CNO (OP-941F) will return a letter identifying approval or nonapproval of the DD 1494 to the CMC (CCT) and to the originating organization, activity, or command. The JFP, USMCEB will distribute approved DD 1494(s) to the appropriate CINC’s, U.S. activities, and agencies to ensure that proper coordination of frequency assignment can be conducted.

6. When any of the electromagnetic parameters, equipment characteristics, nomenclature, or required geographic areas of operation change for C-E equipment/systems for which a frequency allocation has been approved or is pending, a letter

identifying the changes shall be initiated by the originator of the DD 1494 or by the organization, activity, or command which has life cycle project management of the equipment/system. This letter shall be forwarded to the CMC (CCT) for review, and if approved, forwarded to CNO for review and submission to the JFP, USMCEB. For approved applications which have gone through the Joint Frequency Allocation-to-Equipment Process at the JFP and a J/F 12 number has been assigned for accounting purposes (referred to as J/F 12 papers), the JFP will produce a "Note To Holder" identifying the approved changes to the approved frequency allocation (J/F 12 paper).

7. Organizations, activities, or commands which require additional information to an already approved J/F 12 paper(s) (frequency allocation) to coordinate requests for frequency assignment will forward specific requests for information by naval message to CNO WASHINGTON DC, info CMC WASHINGTON DC//CCT// and NAVEMSCEN WASHINGTON DC.

USMC ASSIGNED FREQUENCY MANAGERS

The following commands and activities have billet assignments for USMC Radio Frequency Managers. In addition to rank requirements, the main prerequisite for assignment to one of these billets is possession of the Class B MOS of 2581, Radio Frequency Management Technician, which is awarded upon graduation from the Interservice Radio Frequency Management School, Keesler, AFB, MS.

HQ, FMFPAC, Camp H.M. Smith, HI	MSGT
I MEF, Camp Pendleton, CA	MSGT
II MEF, Camp Lejeune, NC	MSGT
III MEF, Camp Courtney, Okinawa	MSGT
JFMOPAC, Camp H.M. Smith, HI	MSGT
1st MEB, MCAS, Kaneohe Bay, HI	GYSGT
4th MEB, NAB, Norfolk, VA	GYSGT
5th MEB, Camp Pendleton, CA	GYSGT
6th MEB, Camp Lejeune, NC	GYSGT
7th MEB, MCAGCC, 29 Palms, CA	GYSGT
9th MEB, Camp Courtney, Okinawa	GYSGT
MARCORBASESJAPAN, Camp Butler, JA	GYSGT
MCB, Camp Pendleton, CA	GYSGT
MCB, Camp Lejeune, NC	SSGT
Commander, Naval Forces Korea	SSGT
HQ, 4th MARDIV, New Orleans, LA	SSGT
NSA, Fort Meade, MD	(1) GYSGT (1) SSGT